

STATEMENT OF BASIS

as required by LAC 33:IX.3109, for draft Louisiana Pollutant Discharge Elimination System Permit No. LA0122122; AI 31118; PER20020001 to discharge to waters of the State of Louisiana as per LAC 33:IX.2311.

The permitting authority for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

- I. THE APPLICANT IS:** Greater Ouachita Water Company, Inc.
Frenchman's Bend Subdivision STP
P.O. Box 35888
West Monroe, LA 71294
- II. PREPARED BY:** Jim Bondy
- DATE PREPARED:** March 24, 2006
- III. PERMIT ACTION:** revoke LPDES permit LAG570110, AI 31118; GEN19920001
reissue LPDES permit LA0122122, AI 31118; PER20020001
- LPDES permit renewal application received: October 1, 2002
- LPDES general sanitary permit coverage issued: February 11, 1998
LPDES general sanitary permit expired: September 30, 2002
- IV. FACILITY INFORMATION:**
- A. The application is for the discharge of treated sanitary wastewater from a privately owned treatment works serving a Frenchman's Bend residential subdivision.
- B. The permit application does not indicate the receipt of industrial wastewater.
- C. The facility is located at the end of Frenchman's Bend Road in Ouachita Parish.
- D. The treatment facility consists of extended aeration treatment plants. Disinfection is by chlorination.
- E. Outfall 001
- Discharge Location: Latitude 32° 37' 53" North
Longitude 92° 3' 15" West
- Description: treated sanitary wastewater
- Expected Flow: 350 homes @ 400 GPD = 0.140 MGD
- Type of Flow Measurement which the facility is currently using:
- V-Notch Weir

V. RECEIVING WATERS:

The discharge is into River Styx Bayou; thence into the Ouachita River in segment 080102 of the Ouachita River Basin.

The designated uses and degree of support for Segment 080102 of the Ouachita River Basin are as indicated in the table below^{1/}:

Overall Degree of Support for Segment	Degree of Support of Each Use						
	Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
Not Supported	Not Supported	Not Supported	Not Supported	N/A	N/A	N/A	N/A

^{1/}The designated uses and degree of support for Segment 080102 of the Ouachita River Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2004 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 080102 of the Ouachita River Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated October 21, 2005 from Watson (FWS) to Gautreaux (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

VII. HISTORIC SITES:

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required. It should be noted that SHPO's response letter regarding the U.S. Army Corps of Engineers permit for expansion of the Frenchman's Bend Subdivision dated November 20, 2002, identified four recorded archeological sites (16OU256-259) located in the vicinity of the development project and that the potential for unrecorded archeological sites in the vicinity is high. Therefore, before any expansion to the wastewater treatment facility beyond the existing perimeter is undertaken, consultation with the State Historic Preservation Officer is required.

VIII.

PUBLIC NOTICE:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation
Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Jim Bondy, Water and Waste Permits Division
Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

IX.

PROPOSED PERMIT LIMITS:

Subsegment 080102 of the Ouachita River Basin, is not listed on LDEQ's Final 2004 303(d) list as impaired. However, subsegment 080102 was previously listed as impaired for organic enrichment/low DO, nutrients, phosphorus, suspended solids/turbidity/siltation, pathogen indicators, and noxious aquatic plants, for which the below TMDL's have been developed. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional TMDL's and/or water quality studies. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as necessary to achieve compliance with water quality standards.

The following TMDL's have been established for subsegment 080102:

Bayou Chauvin Watershed TMDL for Biochemical Oxygen-Demanding Substances and Nutrients
This TMDL is for only the Bayou Chauvin watershed. It does not include the River Styx Bayou watershed to which the Frenchman's Bend Subdivision STP discharges. Therefore, limits for BOD₅ will be as previously permitted.

The Bayou Chauvin Fecal Coliform TMDL

This TMDL applies to sanitary dischargers. As per the TMDL, "...there will be no change in the permit requirements based upon a wasteload allocation resulting from this TMDL." Therefore, Fecal Coliform effluent limitations will remain as previously permitted.

TMDL for TSS, Turbidity and Siltation for 13 Subsegments in the Ouachita River Basin

As per the TMDL, "Point sources do not represent a significant source of TSS as defined in this TMDL. Because an enforceable mechanism is in place to protect from discharges of organic suspended solids, no TMDL is required for these materials." Therefore, limits for TSS will remain as previously permitted.

Bayou Chauvin TMDL for Noxious Aquatic Plants

As per the TMDL, "No point sources of noxious aquatic plants are known to exist." Therefore, no requirements will be placed in the permit.

Final Effluent Limits:**OUTFALL 001**

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
BOD ₅	11.7	10 mg/l	15 mg/l	Limits are set in accordance with the Statewide Sanitary Effluent Limits Policy for dischargers of this treatment type and size, and with the previous permit.
TSS	17.5	15 mg/l	23 mg/l	Limits are set in accordance with the previous permit which is a Technology Based Limit established through Best Professional Judgement for the type of treatment technology utilized at this facility.

Other Effluent Limitations:**1) Fecal Coliform**

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.b.i, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) pH

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time. (Limits as established through BPJ considering BCT for similar waste streams in accordance with LAC 33:IX.2645.C.).

3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

X. PREVIOUS PERMITS:**LPDES Permit No. LAG570110:** Issued: February 11, 1998

Expired: September 30, 2002

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	<u>Daily Avg.</u>	<u>Daily Max.</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	Report	Report	Continuous	Recorder
BOD ₅	10 mg/l	15 mg/l	1/month	Grab
TSS	15 mg/l	23 mg/l	1/month	Grab
Fecal Coliform Colonies	200	400	1/month	Grab

XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:**A) Inspections**

A review of the files indicates the following most recent inspection was performed:

Date - June 6, 2003

Inspector - LDEQ

Findings and/or Violations -

1. The LPDES permit expired September 30, 2002 but the renewal application was not received by the Department until October 1, 2002.
2. The permit limitations on the DMR forms were incorrect.
3. Flow was being computed using water usage rather than measured as required by the permit.
4. The clarifier and clarifier weir were clogged with solids.
5. A water hose was noted discharging potable water at the rate of approximately 2 to 3 gpm into the final discharge chamber, thus diluting any effluent samples being taken.
6. This facility was referred to enforcement for the above violations.

B) Compliance and/or Administrative Orders

A review of the files indicates that there are no recent enforcement actions administered against this facility:

C) DMR Review

A review of the discharge monitoring reports for the period beginning May 1, 2003 through June 30, 2005 has revealed the following violations:

<u>Month</u>	<u>Parameter</u>	<u>DMR Reported Value</u>	<u>Permit Limit</u>
April 2005	TSS, Monthly Avg.	20.25 mg/l	15 mg/l
	TSS, Weekly Avg.	28.5 mg/l	23 mg/l
May 2005	BOD ₅ , Monthly Avg.	10.22 mg/l	10 mg/l
	BOD ₅ , Weekly Avg.	18.7 mg/l	15 mg/l
	Fecal Coliform, Weekly Avg.	2,304 colonies/ml	400 colonies/ml

XII. ADDITIONAL INFORMATION:

The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional water quality studies and/or TMDL's. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as requested by the permittee and/or as necessary to achieve compliance with water quality standards. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of 0.140 MGD.

Effluent loadings are calculated using the following example:

$$\text{BOD: } 8.34 \text{ lb/gal} \times 0.140 \text{ MGD} \times 10 \text{ mg/l} = 11.7 \text{ lb/day}$$

At present, the **Monitoring Requirements, Sample Types, and Frequency of Sampling** as shown in the permit are standard for facilities of flows 0.10 and 0.50 MGD.

<u>Effluent Characteristics</u>	<u>Monitoring Requirements</u>	
	<u>Measurement</u>	<u>Sample</u>
	<u>Frequency</u>	<u>Type</u>
Flow	Continuous	Recorder
BOD ₅	2/month	Grab
Total Suspended Solids	2/month	Grab
Fecal Coliform Bacteria	2/month	Grab
pH	2/month	Grab

XIII. TENTATIVE DETERMINATION:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to revoke and reissue a permit for the discharge described in this Statement of Basis.

XIV. REFERENCES:

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 1998.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, 2004.

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Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2004.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, Greater Ouachita Water Company, Inc., Frenchman's Bend Subdivision STP, October 1, 2002.